



CINEMA

DSi Series

CTs 2-Channel Series

CTs Multi-Channel Series

XLS Series

DBC® Network Bridge



One-Touch Performance

► FEATURES

- Intuitive front-panel LCD screen, automatic presets for popular JBL cinema speaker systems for quick, easy configuration.
- Onboard digital signal processing includes crossovers, EQ filters, delay, and output limiting.
- Computer connectivity via USB allows fast setup and configuration with HiQnet™ System Architect™ software.
- Rear-panel HD-15 connector provides easy input/output connectivity between DSi amplifiers and new DSi-8M System Monitor.
- Barrier strip outputs, removable Phoenix-style input.

Models	POWER OUTPUT				
	2-ohm Dual (per channel)	4-ohm Dual (per channel)	8-ohm Dual (per channel)	4-ohm Bridge	8-ohm Bridge
DSi 1000	700W**	500W*	275W*	1,400W**	1,000W*
DSi 2000	1,000W**	800W*	475W*	2,000W**	1,600W*
DSi 4000	1,600W**	1,200W*	650W*	3,200W**	2,400W*

*1 kHz power with 0.5% THD. **With 1% THD.

► SPECIFICATIONS

Performance

Frequency Response: +0/–1 dB from 20 Hz to 20 kHz at 1 watt into 4 ohms.

Load Impedance: Safe with all types of loads. Rated for 2 to 8 ohms in Stereo mode, 4 to 16 ohms in Bridge-Mono mode.

Sensitivity:

At 8 ohm rated output:

DSi 1000: 2.35V.
DSi 2000: 3.09V.
DSi 4000: 3.61V.

At 4 ohm rated output:

DSi 1000: 2.24V.
DSi 2000: 2.84V.
DSi 4000: 3.47V.

At 2 ohm rated output:

DSi 1000: 1.88V.
DSi 2000: 2.24V.
DSi 4000: 2.84V.

Signal to Noise Ratio (below rated 8-ohm power at 1 kHz): 100 dB (A weighted).

Damping Factor: Better than 500 from 20 Hz to 400 Hz.

Crosstalk: > 70 dB below rated power, 20 Hz to 1 kHz.

Voltage Gain at 1kHz, 8 ohm rated output:

DSi 1000: 26 dB.
DSi 2000: 26 dB.
DSi 4000: 26 dB.

Input Stage: Input is electronically balanced and employs precision 1% resistors.

Input Impedance (nominal): 20 k ohms, balanced; 10 k ohms, unbalanced.

Maximum Input Signal: +22 dBu typical.

AC Line Voltage and Frequency Configurations Available: 100V, 120V-240V, 50/60 Hz.

AC Line Current:

DSi 1000: 6.5A.
DSi 2000: 6.9A.
DSi 4000: 8.0A.

At Idle: Draws no more than 90 watts.

Operating Temperature: 0° C to 40° C at 95% relative humidity (non-condensing).

DSP Section

Input EQ: 6 parametric filters per channel with adjustable Q, ±15 dB boost/cut. Also adjustable high and low shelving filters. This 8-filter EQ section can be bypassed.

Crossover Filters: Highpass and lowpass per channel. Butterworth 6/12/18/24 dB per octave, Linkwitz-Riley 24/48 dB per octave. Also includes ±15 dB bandpass gain and polarity control.

Output EQ: 8 parametric filters per channel with adjustable Q, ±15 dB boost/cut. This 8-filter EQ section can NOT be bypassed. Filters are enabled individually.

Output Limiter: Prevents clipping and protects loudspeakers. Choice of –3, –6, or –12 dB threshold per channel.

Delay: Up to 50 msec total delay per channel.

Presets: 20 presets. One is “DSP OFF.” Fifteen are factory-set for JBL Cinema systems. Four are user-definable.

Front Panel Indicators

Level: Detented rotary level control, one per channel.

Power Switch: On/off switch applies AC power to the amplifier.

Sel/Prev/Next Buttons: Three buttons near the LCD screen are used to access menu items and front panel lockout.

LCD Screen: Backlit liquid crystal display shows speaker presets and signal processing.

Signal Indicator: Green LED, one per channel, illuminates when a very low-level signal is present at input.

–10 Indicator: Green LED flashes when output signal exceeds –10 dB below clip.

–20 Indicator: Green LED flashes when output signal level exceeds –20 dB below clip.

Ready Indicator: Green LED, one per channel, illuminates when the amplifier is ready to produce audio.

Clip Indicator: Red LED, one per channel, turns on at the threshold of audible distortion.

Temp Indicator: Red LED, one per channel, illuminates under excessive temperature conditions.

Power Indicator: Blue LED illuminates when the amplifier has been turned on and has power.

Back Panel Controls and Connectors

AC Line Connector: NEMA 5-15P (15A).

Input Connector: Two 3-pin removable Phoenix-type connectors each accept a balanced line-level input signal.

Output Connectors: 4-position barrier strip with connectors for dual loudspeakers or bridge-mono loudspeaker.

HiQnet USB Connector: Type B, connects to a USB port in a PC.

HD-15 Connector: For cinema I/O compatibility with DSi-8M System Monitor.

Protection

DSi-Series amplifiers are protected against shorted, open or mismatched loads; overloaded power supplies; excessive temperature; chain destruction phenomena; excessive output current, and input overload damage. They also protect loudspeakers from input/output DC, large or dangerous DC off-sets and turn-on/turn-off transients.

Construction

Chassis: Steel.

Cooling

Proportional speed fan with front-to-rear airflow.

Dimensions

EIA Standard 19-in. (48.3-cm) rack mount width (EIA RS-310-B), 3.5 in. (8.9 cm) high and 12.25 in. (31.11 cm) deep behind mounting surface.

Weight

Net Weight:
19 lb (8.6 kg).

Shipping Weight:
22 lb (10.0 kg).

Regulatory Certifications



Note: All measurements apply to all models of CDi series amplifiers in stereo mode with 8-ohm loads and an input sensitivity of 26-dB gain, 1-kHz at rated power unless otherwise specified. Specifications for units supplied outside the U.S.A. may vary slightly at different AC voltages and frequencies.



C I N E M A

The Crown® DSi Series of power amplifiers provides onboard digital signal processing including crossovers, EQ filters, delay and output limiting. A rear panel HD-15 connector provides easy input/output connectivity between DSi amplifiers and the new DSi-8M System Monitor. The intuitive front panel LCD screen guides installers through a setup process—featuring presets for the industry-standard JBL cinema loudspeaker systems—to make configuration quick and easy. At the touch of a button, Crown’s DSi cinema amplifiers deliver perfectly matched performance with each award-winning JBL ScreenArray® system, making this the ultimate cinema solution.



AMPLIFIERS ► CINEMA

DSi-8M: Convenient Monitoring
DSi-8M



Performance
Monitor

► FEATURES

- Compact 2-rack unit.
- 8 channels for monitoring processor or amplifier inputs.
- All inputs and outputs are balanced to interface with new cinema processors.
- No level jumps when switching between processor and amplifiers.
- 25-pin D-sub connectors, plus removable terminal blocks and HD-15 for quick, hassle-free connections.
- Designed to work with bi-amplified sound systems to monitor the high- and low-frequency outputs from the left, center and right channels.

► SPECIFICATIONS

Performance
Input Impedance (processor inputs): 10 kilohms.
Input Impedance (power amplifier inputs): > 50 kilohms.
Power Requirements: 100-240VAC, 50-60 Hz, 32 watts.

Front Panel Controls and Indicators
Channel Select Buttons and LEDs: Eight push-button switches, one for each input channel. Pressing a button monitors the signal from that channel, and lights the corresponding LED. Any combination of eight channels can be selected.
Volume Control: Rotary potentiometer with knob controls the volume of the internal or external speaker. Has no effect on the VU Bargraph Meter display.
Processor/Amplifier Selector Switch and LEDs: Push-button switch with corresponding LEDs selects inputs from cinema processor or power amplifiers for monitoring.
VU Bargraph Meter: 12-segment meter displays input level of selected channels from -40 VU to +3 VU. May be calibrated by the rear panel trim adjustment. Operates independently of the Volume Control.

Test Jack: 1/4-inch phone jack lets the user monitor the audio output of the DSi-8M. Inserting a mono or stereo 1/4-inch phone plug here disables the internal speaker and routes the audio output to the Test Jack.
Internal Speaker: For convenient monitoring at the monitor panel.
Power Switch and Power LED: Rocker switch turns power on or off. LED illuminates when power is on.

Back Panel Controls and Connectors
IEC AC Power Receptacle: Connects to an IEC AC power cord.
Amplifier Outputs Connector 1: 10-pin removable terminal block connects to the power amplifier speaker outputs for the Ls, Rs, Bsl, Bsr and Sw channels.
Amplifier Outputs Connector 2: 10-pin removable terminal block connects to the power amplifier speaker output for the Lh, Ll, Ch, Cl, Rh and Rl channels.
Amplifier Level Control: Trimpot adjusts the level of the input signals from the power amplifiers.
Processor Level: Trimpot adjusts the level of the input signals from the processor.

HD-15 Connector 1: For cinema I/O compatibility. Connects to Ls/Rs amplifier.
HD-15 Connector 2: Connects to Bsl/Bsr amplifier.
HD-15 Connector 3: Connects to Rl/Rh amplifier.
HD-15 Connector 4: Connects to Sw amplifier.
HD-15 Connector 5: Connects to Ll/Lh amplifier.
HD-15 Connector 6: Connects to Cl/Ch amplifier.
Optional Input Connector: 25-pin D-sub connector connects to the EX output of the processor.
Bargraph Level: Trimpot adjusts the sensitivity of the front-panel VU Bargraph Meter.
Main Input Connector: 25-pin D-sub connector connects to the main outputs of the processor.
“EX” Selector Switch: 8-position DIP switch. Turn on switches 1-4 if system is without EX. Turn on switches 5-8 if system is with EX. This routes the correct Ls/Rs inputs to the DSi-8M circuitry.

Construction
Chassis: Steel.

Dimensions
EIA Standard 19-inch (48.3-cm) rack mount width (EIA RS-310-B), 3.5 inches (8.9 cm) high and 9.625 inches (24.4 cm) deep behind front mounting surface.

Weight
Net Weight: 10 lb 2 oz (4.63 kg).
Shipping Weight: 16 lb (7.26 kg).

Regulatory Certifications*
UL CE FC

*pending

The Crown® DSi-8M is a projection booth monitor designed to work with bi-amplified cinema systems using the Crown DSi Series amplifiers. All controls necessary for daily operation of the DSi-8M are easily accessible on the front panel. 8-channel monitoring allows you to monitor either the processor or the power amplifier’s outputs: L, C, R, Ls, Rs, Bsl, Bsr, and Sub in any combination. Input levels from the processor and power amplifier can be adjusted independently. There are no huge level jumps when switching between processor and power amplifiers. The bargraph display can be calibrated to the reference level for your theater. The projectionist can see auditorium levels instantly.

C I N E M A

CTs 2-Channel



► FEATURES

- High power density. All two channel models in a 2U chassis.
- New Crown Switching Power Supply for lighter weight.
- Selectable “Constant-Voltage” or low-impedance operation per channel.
- 100V direct outputs on CTs 2000, CTs 3000.
- Fully PIP2™-compatible.

POWER OUTPUT*

Models	2-ohm Dual (per channel)	4-ohm Dual (per channel)	70V Dual (per channel)	4-ohm Bridge
CTs 600	150W**	300W	300W	300W**
CTs 1200	250W**	600W	600W	500W**
CTs 2000	1,000W	1,000W	1,000W	2,000W
CTs 3000	1,500W	1,500W	1,500W	3,000W

*Maximum average power in watts at rated THD, 20 Hz - 20 kHz.
** At 1 kHz.

CTs Multi-Channel



► FEATURES

- High power density: Four-channel model in a 2U chassis, eight-channel model in a 3U chassis.
- New Crown Switching Power Supply for lighter weight.
- Selectable “Constant-Voltage” or low-impedance (4/8 ohm) operation per channel-pair.
- 100V direct outputs.
- New “FIT” (Fault Isolation Topology) circuitry isolates fault conditions without affecting neighboring channels.
- Accept VCA-MC accessory modules.

POWER OUTPUT*

Models	All channels driven		70V Dual	All channel pairs driven
	4-ohm Dual	8-ohm Dual		8-ohm Bridge
CTs 4200	260W	200W	220W**	520W
CTs 8200	200W	160W	200W**	400W

*Maximum average power in watts at 1kHz at 0.1% THD.
**Constant Voltage full-bandwidth power ratings support 100 Hz to 20 kHz due to automatic high-pass filters.

XLS Series



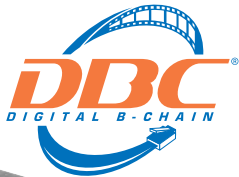
► FEATURES

- Housed in a rugged, all-steel 2U chassis.
- Efficient forced-air fan prevents excessive thermal buildup.
- Electronically balanced XLR inputs; touchproof binding post and Speakon outputs.
- Precision detented level controls, power switch, and four LEDs, which indicate clip for each channel, power and fault conditions.

POWER OUTPUT*

Model	4-ohm Dual (per channel)	8-ohm Dual (per channel)	8-ohm Bridge
XLS 202	300W	200W	600W
XLS 402	450W	300W	900W
XLS 602	600W	380W	1,200W
XLS 802	800W	500W	1,600W

*Maximum average power in watts at 0.5% THD, 1 kHz.



DBC® Network Bridge

All-Digital Cinema Solution

At the heart of a Digital B-Chain™ system, the Crown DBC® Network Bridge allows you to distribute multiple channels of digital audio over standard fast Ethernet hardware and cabling for use in traditional, e-cinema and d-cinema applications.

The DBC Network Bridge accepts standard analog and/or AES digital audio and CobraNet™ digital channels from other Cinema processors (Dolby®, DTS®), Cinema Servers, or Alternative Content Media Players; and bridges them to a Crown DBC network.

This network is Crown’s proprietary “Single-Click” solution that provides system control, monitoring, and digital audio transport. The DBC network (fed by the DBC Network Bridge) distributes the digital audio and system-wide control protocol to Crown amplifiers. The DBC Network Bridge also provides the necessary system equalization, which is stored and recalled via a series of presets for use in both feature film and alternative content programming.

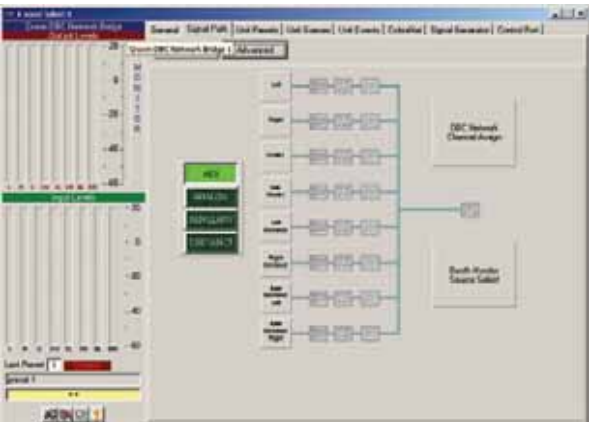


► FEATURES

- Accepts 8 inputs (7.1 surround) via one of the following formats: Analog AES/EBU CobraNet™.
- Selectable mic or line auxiliary analog XLR inputs for alternative content.
- Primary and Secondary 100 Mb Ethernet “Single-Click” connection for DBC network.
- Front-panel LCD display and control functions of internal presets and system setup.
- Full 32-channel CobraNet digital audio transmit/receive capability.
- Enhanced matrix mixer capable of full 8x32 crosspoint matrix mixing.
- 24-bit/48 kHz converters.
- Studio-grade DSP with multiple filter banks for each channel (up to 256 filters).
- 32 presets, 32 scenes, and 32 events can be stored, labeled, and recalled.
- Analog monitoring of cinema processor inputs, pre-amp, or post-amp signals.
- Multiple-function control port for third-party automation/control.
- Internal clock/calendar for scheduling events.
- Auto leveling functions for dynamic volume control of auditoriums or lobby.
- Ambient leveling functions for maintaining maximum signal-to-noise ratio.
- Three-year, no-fault, fully transferable warranty.



Digital Circus, Raleigh, North Carolina, USA.



DBC Network Bridge control screen.

CINEMA

Regulatory Certifications

THX® CTs 600, CTs 1200, CTs 2000, CTs 3000, CTs 4200, CTs 8200



CTs Series



CTs, DSi and XLS Series



CTs Series



CTs Series



DSi, XLS Series

Note: For more information about the products featured in this section, please refer to the following pages:
CTs 2-Channel: page 4, CTs Multi-channel: page 6, XLS Series, page 36.

Crown Cinema Systems employ quality Crown professional amplifiers along with optional amplifier accessories for the best in cinema sound. Crown’s Digital B-Chain system, which provides the first all-digital cinema solution, employs Crown’s CTs Series amplifiers, IQ Networking amplifier modules, and Crown’s DBC® Network Bridge for the first all-digital cinema solution.



